



Atty Dkt No. 2300-1591
PP01591.101

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 1 of 4

In the Application of GRANDI et al.

Serial No.: 09/914,454

Art Unit: ~~Unassigned~~ 1645

Filed: February 9, 2000

Examiner: ~~Unassigned~~ MINNIFIELD

Title: ENHANCEMENTS OF BACTERICIDAL ACTIVITY OF NEISSERIA ANTIGENS WITH
OLIGONUCLEOTIDES CONTAINING CG MOTIFS

U.S. PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Date	Name	Class	Sub Class	Filing Date
	A1						

FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sub Class	Translation YES NO	
<i>MM</i>	B1	WO 96/02555	1 February 1996	PCT				
<i>MM</i>	B2	WO 98/16247	23 April 1998	PCT				
<i>MM</i>	B3	WO 98/18810	7 May 1998	PCT				
<i>MM</i>	B4	WO 98/18810	7 May 1998 (corrected version)	PCT				
<i>MM</i>	B5	WO 98/37919	3 September 1998	PCT				
<i>MM</i>	B6	WO 98/40100	17 September 1998	PCT				
<i>MM</i>	B7	WO 98/49288	5 November 1998	PCT				
<i>MM</i>	B8	WO 98/52581	26 November 1998	PCT				
<i>MM</i>	B9	WO 98/55495	10 December 1998	PCT				

Examiner:

MM Minnifield

Date Considered: 4-17-05

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Atty Dkt No. 2300-1591
PP01591.101

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 2 of 4

In the Application of GRANDI et al.

Serial No.: 09/914,454

Art Unit: Unassigned 1645

Filed: February 9, 2000

Examiner: Unassigned MINNIFIELD

Title: ENHANCEMENTS OF BACTERICIDAL ACTIVITY OF NEISSERIA ANTIGENS WITH
OLIGONUCLEOTIDES CONTAINING CG MOTIFS

<u>MM</u>	B10	WO 99/57280	11 November 1999	PCT	<u>5</u>	<u>2</u>		
<u>MM</u>	B11	WO 99/58683	18 November 1999	PCT	<u>5</u>	<u>2</u>		

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Exam. Init.	Ref. Desig.	Description
<u>MM</u>	C1	Ballas et al., "Induction of NK Activity in Murine and Human Cells by CpG Motifs in Oligodeoxynucleotides and Bacterial DNA," <i>J. Immunol.</i> , <u>157</u> :1840-1845 (1996)
<u>MM</u>	C2	Bird, "CpG Islands As Gene Markers In The Vertebrate Nucleus," <i>Trends Genet.</i> , <u>3</u> :342-347 (1987)
<u>MM</u>	C3	Chu et al., "CpG Oligodeoxynucleotides Act As Adjuvants That Switch On T Helper 1 (Th1) Immunity," <i>J. Exp. Med.</i> , <u>186</u> :1623-1631 (1997)
<u>MM</u>	C4	Cowdery et al., "Bacterial DNA Induces NK Cells to Produce IFN- γ In Vivo and Increases the Toxicity of Lipopolysaccharides," <i>J. Immunol.</i> , <u>156</u> :4570-4575 (1996)
<u>MM</u>	C5	Davis et al., "CpG DNA Is a Potent Enhancer of Specific Immunity in Mice Immunized with Recombinant Hepatitis B Surface Antigen," <i>J. Immunol.</i> , <u>160</u> :870-876 (1998)
<u>MM</u>	C6	Halpern et al., "Bacterial DNA Induces Murine Interferon- γ Production by Stimulation of Interleukin-12 and Tumor Necrosis Factor- α ," <i>Cell. Immunol.</i> , <u>167</u> :72-78 (1996)

Examiner:

MM Minnifield

Date Considered: 4-17-05

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Atty Dkt No. 2300-1591
PP01591.101

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 3 of 4

In the Application of GRANDI et al.








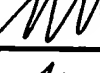

Serial No.: 09/914,454

Art Unit: ~~Unassigned~~ 1645

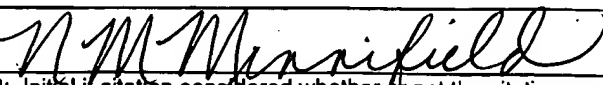
Filed: February 9, 2000

Examiner: ~~Unassigned~~ MINNIFIELD

Title: ENHANCEMENTS OF BACTERICIDAL ACTIVITY OF NEISSERIA ANTIGENS WITH
OLIGONUCLEOTIDES CONTAINING CG MOTIFS

Exam. Init.	Ref. Desig.	Description
	C7	Klinman et al, "CpG motifs present in bacterial DNA rapidly induce lymphocytes to secrete interleukin 6, interleukin 12, and interferon γ ," <i>Proc. Natl. Acad. Sci. USA</i> , <u>93</u> :2879-2883 (1996)
	C8	Krieg et al., "CpG motifs in bacterial DNA trigger direct B-cell activation," <i>Nature</i> , <u>374</u> :546-549, (1995)
	C9	Lipford et al, "CpG-containing synthetic oligonucleotides promote B and Cytotoxic T cell responses to protein antigen: a new class of vaccine adjuvants," <i>Eur. J. Immunol.</i> , <u>27</u> :2340-2344 (1997)
	C10	Messina et al, "Stimulation of In Vitro Murine Lymphocyte Proliferation by Bacterial DNA," <i>J. Immunol.</i> , <u>147</u> :1759-1764 (1991)
	C11	Millan et al., "CpG DNA can induce strong Th1 humoral and cell-mediated immune responses against hepatitis B surface antigen in young mice," <i>Proc. Natl. Acad. Sci.</i> , <u>95</u> :15553-15558 (1998).
	C12	Moldoveanu et al, "CpG DNA, a novel immune enhancer for systemic and mucosal immunization with influenza virus," <i>Vaccine</i> , <u>16</u> :1216-1224 (1998)
	C13	Roman et al., "Immunostimulatory DNA sequences function as T helper-1-promoting adjuvants," <i>Nat. Med.</i> , <u>3</u> :849-854 (1997)
	C14	Stacey et al., "Macrophages Ingest and Are Activated by Bacterial DNA," <i>J. Immunol.</i> , <u>157</u> :2116-2122 (1996)
	C15	Sun et al., "DNA as an Adjuvant: Capacity of Insect DNA and Synthetic Oligodeoxynucleotides to Augment T Cell Responses to Specific Antigen," <i>J. Exp. Med.</i> , <u>187</u> :1145-1150, (1998).

Examiner:



Date Considered: 4-17-05

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Atty Dkt No. 2300-1591
PP01591.101

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 4 of 4

In the Application of GRANDI et al.

Serial No.: 09/914,454

Art Unit: ~~Unassigned~~ 1645

Filed: February 9, 2000

Examiner: ~~Unassigned~~ MINNIFIELD

Title: ENHANCEMENTS OF BACTERICIDAL ACTIVITY OF NEISSERIA ANTIGENS WITH
OLIGONUCLEOTIDES CONTAINING CG MOTIFS

Exam. Init.	Ref. Desig.	Description
<i>M</i>	C16	Weiner et al., "Immunostimulatory oligodeoxynucleotides containing the CpG motif are effective as immune adjuvants in tumor antigen immunization," <i>Proc. Natl. Acad. Sci. USA</i> , <u>94</u> :10833-10837 (1997)
<i>M</i>	C17	Yamamoto et al., "In vitro Augmentation of Natural Killer Cell Activity and Production of Interferon- α/β and - γ with Deoxyribonucleic Acid Fraction from <i>Mycobacterium bovis</i> BCG" <i>Jpn. J. Cancer Res.</i> , <u>79</u> :866-873 (1988)
<i>M</i>	C18	Yi et al., "CpG DNA Rescue of Murine B Lymphoma Cells from Anti-IgM-Induced Growth Arrest and Programmed Cell Death Is Associated with Increased Expression of c-myc and bcl-x _l ^{1,2} ," <i>J. Immunol.</i> , <u>157</u> :4918-4925 (1996)
<i>M</i>	C19	Yi et al., "CpG Motifs in Bacterial DNA Activate Leukocytes Through the pH-Dependent Generation of Reactive Oxygen Species," <i>J. Immunol.</i> , <u>160</u> :4755-4761 (1998)
<i>M</i>	C20	Yi et al., "CpG Oligodeoxynucleotides Rescue Mature Spleen B Cells from Spontaneous Apoptosis and Promote Cell Cycle Entry," <i>J. Immunol.</i> , <u>160</u> :5898-5906 (1998)
<i>M</i>	C21	Yi et al., "Rapid Immune Activation by CpG Motifs in Bacterial DNA," <i>J. Immunol.</i> , <u>157</u> :5394-5402 (1996)
<i>M</i>		

Examiner:

M Minnifield

Date Considered: 4-17-05

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.